

## **REMARKS**

### **Claim Rejections**

Claims 21, 22 and 24-26 have been rejected under 35 U.S.C. § 102 as being anticipated by the Krengel '204 patent. Claim 23 has been rejected under § 103 as being obvious over Krengel. Claims 29-35 have been rejected under § 103 as being obvious over the combination of Krengel and Merrien. Claims 36 and 37 have been rejected under § 103 as being obvious over Krengel and Pereira. Applicant respectfully traverses these rejections, and requests reconsideration of the claims.

### **History of Independent Claims 1 and 29**

This Application has been pending for nearly five years, and has had six Office Actions on the merits (including an Advisory Action), and five previous Amendments to the claims. Independent claim 21 was included in the original Application, and was rejected in the first Office Action dated April 29, 2008, as being obvious over the Krengel '204 patent as modified by Chandler. In the first Amendment dated July 16, 2008, Applicant narrowed claim 21, which was then rejected in the second Office Action, dated October 7, 2008, as being obvious over the primary reference Knapp, as modified by Krengel. In the second Amendment, dated February 9, 2009, claim 21 was not amended. In the third Office Action, dated February 25, 2009, the Examiner withdrew any citation to the Krengel '204 patent, and rejected claim 21 under § 103 as being obvious over Delot. Applicant did not amend claim 21 in the third Amendment, dated April 24, 2009, and in the fourth and final Office Action, dated August 12, 2009, claim 21 was again rejected as being obvious over Delot. Applicant's Amendment After Final, dated November 11, 2009, did not amend claim 21, and was entered in the Advisory Action, dated

November 23, 2009. Applicant then filed an RCE, dated December 14, 2009, with a further narrowing Amendment of claim 21. Now, in the sixth Office Action, dated June 23, 2010, the Examiner rejects claim 21 as being anticipated by the Kregel '204 patent.

Thus, the Kregel patent was first cited as a primary reference in a § 103 rejection of claim 21; then Kregel became a secondary reference in a § 103 rejection of claim 21; then Kregel was withdrawn as a reference in the third and fourth Office Actions; and now returns as a § 102 reference against claim 21. Thus, the same Examiner who initially rejected the broader claim 21 as originally filed based upon Kregel for obviousness, now rejects a narrower claim 21 as being anticipated by Kregel. This simply lacks common sense. As the Supreme Court explained in KSR, common sense should be used in evaluating claims for patentability. KSR v. Teleflex, 127 S. Ct. 1727, 1742-43 (2007).

The rejection history of independent claim 29 also does not make sense. Claim 29 was first added to the Application in the initial Amendment dated July 16, 2008, and was rejected in the October 7, 2008 Office Action under § 103 based upon the Kregel '148 patent. The next Amendment on July 9, 2009 did not amend claim 29, which was then rejected in the February 25, 2009 Office Action as being obvious over Delot, without citation to either Kregel '148 or '204. In the next Amendment, dated April 24, 2009, Applicant again maintained claim 29 without amendment, which was then finally rejected as being obvious over Delot in the August 12, 2009 Office Action. In November 11, 2009 Amendment After Final did not change claim 29, but the rejection was maintained in the Advisory Action dated November 23, 2009. In the Amendment accompanying the RCE dated December 14, 2009, claim 29 was narrowed and now has been rejected under § 103 based upon the combination of Kregel '204 and Merrien. Thus, even though the Kregel '204 patent has been known by the Examiner since the first Office Action,

more than two years ago, this prior art reference was not cited against claim 29 in three prior Office Actions, and is now cited for the first time after claim 29 has been narrowed in the RCE Amendment.

### **Claim 21 Distinguishes Over Krengel**

Claim 21 has been amended to positively recite that the tank and the camera each have an internal pressure, "with the tank pressure being greater than the camera pressure, such that melt will move from the tank upwardly through the vertical passage to the camera." This positively recited claims limitation cannot be ignored, as was the previous "intended use" claim terminology (as stated on page 3 of the Office Action). This limitation of the tank pressure being greater than the camera pressure is not met by Krengel, which teaches the exact opposite. In Krengel, the pressure of the camera 204 is greater than the pressure of the tank 220, as stated at column 10, lines 63-65 (and as explained in Applicant's first Amendment, dated July 16, 2008, at pages 13-14). Rather than having a pressure differential transfer melt from the tank to the camera, as in the present invention, Krengel utilizes a pump 224 to pump melt from the tank 220 to the camera 204. As described in paragraph 15 of Applicant's published Application, product coating apparatus which utilize pumps have disadvantages which significantly decrease the safety characteristics of the industrial equipment. For example, the coating equipment having pumps has fast wearing of the passages and melt contamination with materials from which the passages are made, which in turn, causes deterioration of the coating formation, and therefore decreased quality of the product. (See published Application ¶ 15). The present Application avoids the problems of coating machines having a melt pump, such as Krengel, by using the pressure

differential between the tank and camera to transfer melt from the tank to the camera, as set forth in claim 21.

Since Krengel teaches the opposite pressure differential from that required of claim 21, claim 21 distinguishes over Krengel so as to be allowable, along with the claims depending therefrom. Accordingly, the rejection of claim 21 and its depending claims should be withdrawn.

### **Claim 29 Distinguishes Over the Cited References**

Independent claim 29 has been amended to positively recite that the camera has an internal pressure less than atmospheric pressure to prevent leakage of melted coating material through the inlet and outlet of the camera. Claim 29 further requires a pressure detector for the camera. The Examiner acknowledges on page 6 of the Office Action that Krengel does not have the camera pressure detector, but cites Merrien for pressure detector in a tank of molten metal. The Examiner then concludes that it would be obvious to modify Krengel to include a pressure detector in the camera so as to have greater control of the pressure. The Examiner cites column 9, lines 41-60 of Krengel regarding the desire to control pressure. However, this passage of Krengel refers to the control of pressure to keep air out of the galvanizing tank or camera 108 by having the camera pressure greater than the pressure of the tank 98. There is no discussion in this passage of Krengel of having the pressure of the camera 108 being less than atmospheric pressure to prevent melt leakage. Merrien also fails to teach camera pressure less than atmospheric pressure so as to prevent leakage of melted coating material from the camera.

Therefore, claim 29 distinguishes over the cited references, so as to be allowable, along with the claims depending therefrom. Accordingly, the § 103 rejection of claim 29 and its depending claims should be withdrawn.

The positive recitation of the camera pressure being less than atmospheric pressure must be considered and cannot be ignored as merely an "intended use" recitation, as asserted on page 4 of the Office Action. It is clear that the Supreme Court considers functionality to be one factor to consider in determining obviousness, as explained in its KSR decision. KSR, 127 S. Ct. at 1739-40 (2007). As both the Federal Circuit Court of Appeals and the Patent Office Court of Appeals has explained, every word in a claim is important and must be considered, and no words can be ignored. Exxon Chemical Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1557 (Fed. Cir. 1995); In re Sabatino, 480 F.2d 911, 912-13, (CCPA 1973). Thus, the pressure limitations of claims 21 and 29 cannot be disregarded.

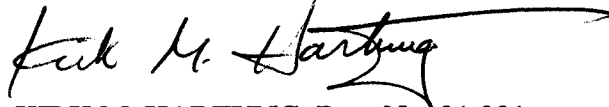
## **Conclusion**

In view of the foregoing, Applicant respectfully requests that the rejections of the claims be withdrawn and that a Notice of Allowance be issued.

No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kirk M. Hartung", with a long horizontal flourish extending to the right.

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